

Amendments to the Claims:

1-36. (Cancelled)

37. (currently amended) A ~~unit~~ cartridge for preparing reaction mixtures for chemical reactions with a sample, comprising an inlet and an outlet, and at least one support, said cartridge allowing the sample to flow through in the vertical direction, wherein ~~the composition of claim 26~~ a composition in the form of a lyophilizate comprising:

_____ a polymerase;

_____ MgCl₂ and optionally at least one further alkali metal and/or alkaline earth metal halide;

_____ deoxyribonucleotide triphosphates (dNTPs);

_____ at least one primer;

_____ a stabilizer;

_____ substances for detection of the reaction product; and optionally further additives,

is bound to at least one ~~support~~ membrane so that said sample is mixed with said composition when passing through said membrane in order to provide said reaction mixture.

38. (Cancelled)

39. (currently amended) The ~~unit~~ cartridge of claim 37, wherein said chemical reaction is the polymerase chain reaction.

40 - 41. (Cancelled)

42. (currently amended) The ~~unit~~ cartridge of claim 37, wherein a device for applying elevated pressure or reduced pressure is provided.

43. (currently amended) The ~~unit~~ cartridge of claim 37, wherein a capillary is attached above the inlet.
44. (currently amended) The ~~unit~~ cartridge of claim 37, wherein one or more additional membranes or supports are present between the inlet and the support to which the composition of claim 1 is bound.
45. (currently amended) The ~~unit~~ cartridge of claim 44, wherein 4 additional membranes are present between the inlet and the support to which the composition of claim I is bound.
46. (currently amended) The ~~unit~~ cartridge of claim 37, wherein at least one additional support is designed so that polynucleotides can be bound thereto.
47. (currently amended) The ~~unit~~ cartridge of claim 46, wherein said additional support is a membrane.
48. (currently amended) The ~~unit~~ cartridge of claim 46, wherein said additional support is designed by providing diethylaminoethyl groups.
49. (currently amended) The ~~unit~~ cartridge of claim 47, wherein said additional membrane is impregnated with a substance which increases the surface tension of a liquid.
50. (currently amended) The ~~unit~~ cartridge of claim 49, wherein said substance which increases the surface tension of a liquid is a polydimethylsiloxane.
51. (currently amended) The ~~unit~~ cartridge of claim 44, wherein a substance which absorbs solids is provided in the space between two membranes.

52. (Cancelled)

53. (currently amended) The ~~unit~~ cartridge of claim 44, wherein the additional membrane located closest to the inlet is impregnated with a lysing agent.

54. (currently amended) The ~~unit~~ cartridge of claim 37, wherein a unit for supplying a liquid is provided above the support provided for binding polynucleotides.

55. (currently amended) The ~~unit~~ cartridge of claim 54, wherein said liquid is an eluent.

56. (currently amended) The ~~unit~~ cartridge of claim ~~37~~ 54, wherein said unit for supplying a liquid is separated from the interior of the unit by a membrane, which can be made permeable on application of reduced pressure.

57 - 65. (Cancelled)

66. (currently amended) A device for preparing reaction mixtures for chemical reactions, comprising

at least one ~~unit~~ cartridge according to claim 37;

at least one reaction device which is connected via an aperture to the outlet of a ~~unit~~ said cartridge and, after charging with a reaction mixture, can be separated from the sample preparation device.

67. (previously presented) The device of claim 66, wherein said chemical reaction is the polymerase chain reaction.

68. (currently amended) The device of claim 66, wherein said device comprises three ~~unit~~ cartridges.

69. (Cancelled).

70. (currently amended) The device of claim 66, wherein said at least one reaction device can, after the charging with a reaction mixture, be taken out of the sample preparation device and transferred into a device for carrying out and, ~~where~~ appropriate, optionally evaluating said chemical reaction.

71. (currently amended) The device of claim 66, further comprising a device for carrying out and evaluating a chemical reaction, wherein said at least one ~~unit~~ cartridge can, after charging of said reaction device, be separated from the remaining device.

72. (previously presented) The device of claim 71, wherein said chemical reaction is the polymerase chain reaction.

73 - 74. (Cancelled)